Immunity to a Transplantable Tumor of the Japanese Waltzing Mouse."

The session of the afternoon consisted of a symposium on the subject "Recent Advances in the Fundamental Problems of Genetics."

H. H. Bartlett, "The Status of the Mutation Theory with Especial Reference to the Genus *Œnothera*."

W. L. Tower, "Experimental Reproduction of Recurrent Mutations."

E. M. East, "The Significance of Selective Elimination of Gametes and Zygotes in Partially Sterile Hybrids."

H. S. Jennings, "Heredity, Variation and Selection in Uniparental Reproduction."

C. B. Davenport, "Inheritance of Human Traits."

The Naturalists' dinner was held on the evening of December 30, at the Hotel Chittenden, with one hundred and fifty in attendance. Professor F. R. Lillie, as president of the Naturalists and vice-president of Section F, American Association for the Advancement of Science, read a paper on "The History of the Fertilization Problem."

The officers of the society for 1916 are:

President—Raymond Pearl, Maine Agricultural Experiment Station.

Vice-president—Albert F. Blakeslee, Carnegie Station for Experimental Evolution.

Secretary—Bradley M. Davis, University of Pennsylvania (1914–16).

Treasurer—J. Arthur Harris, Carnegie Station for Experimental Evolution (1915–17).

Additional Members of the Executive Committee—Edward M. East, Harvard University (1916); Henry V. Wilson, University of North Carolina (1915–17); Frank R. Lillie, University of Chicago (1916–18).

BRADLEY M. DAVIS,
Secretary for 1915

THE AMERICAN PSYCHOLOGICAL ASSOCIATION

THE twenty-fourth annual meeting of the American Psychological Association was held at the University of Chicago, December 28, 29 and 30, 1915. The sessions were very largely attended. The program listed more than seventy titles. Of these, twenty-two were studies in mental tests. Animal and educational psychology had eight titles each, while in the field of general experimental psychology there were thirteen papers. Of the remaining number, eight were of a theoretical nature. The address of the president, Professor John B. Watson, of Johns Hopkins University, was on "The Place of the Conditioned-Reflex in Psychology." The speaker explained the method made famous by the Pawlow experiments as it has been adapted for experimentation upon human subjects in the Hopkins Laboratory, and discussed the possibilities of the method as a means of obtaining important psychological results. A special feature of the program was a discussion on "The Relation of Psychology to Science, Philosophy and Pedagogy in the Academic Curriculum." The discussion dealt with the practical relations which psychology must, or should, assume towards the departments of instruction indicated. At the conclusion of the set papers a lively debate turned particularly upon the question of psychology's relation to the training of teachers. Professor C. H. Judd in his paper had contended that psychology is not a necessary prerequisite to the study of pedagogy.

On the day following the close of the meetings some forty members were the guests of Dr. William Healy. The party inspected the Detention Home of the Cook County Juvenile Court, lunched at Hull House, and, during the afternoon, sat with Judge Merritt W. Pinckney at a session of the Juvenile Court. On Monday, January 3, a joint session with Section VIII. (sub-section "Sociological Medicine") of the Pan-American Scientific Congress was held at the Raleigh Hotel, Washington, D. C.

As officers for the current year, Professor Raymond Dodge, of Wesleyan University, was elected president, while Professors H. A. Carr, of the University of Chicago, and Knight Dunlap, of the Johns Hopkins University, were selected to succeed Professors J. W. Baird and Madison Bentley on the council. An invitation extended by the department of psychology to hold the next annual meeting at Columbia University was accepted. The meeting will occur during "Convocation Week" in affiliation with the American Association for the Advancement of Science. A resolution introduced by a number of past-presidents of the association was voted, which provides for some special observance of this, the twenty-fifth annual meeting of the association.

The tentative plan of conducting election to office in the association which has been in operation for the past three years, will be continued with certain modifications. Hereafter the committee having this matter in charge will function

as an election committee, and will communicate with all members of the association, first, to secure a primary ballot of nominations, and again to secure a ballot of election; votes being taken from a list of candidates receiving the highest number of ballots in the primary. In its modified form this method of election is now before the association as a constitutional amendment.

A resolution was passed to the effect that the association "discourage the use of mental tests for practical psychological diagnosis by individuals psychologically unqualified for this work." By resolution, also, the retiring president was authorized to appoint a committee for the purpose of expressing approval of plans for the establishment of a station for the study of the behavior of primates. The committee, as appointed, consists of Professor J. R. Angell, University of Chicago, chairman; Professor Raymond Dodge, Wesleyan University; President G. Stanley Hall, Clark University; Professor G. M. Stratton, University of California, and Professor E. L. Thorndike, Teachers College, Columbia University.

R. M. OGDEN,
Secretary

THE BOTANICAL SOCIETY OF AMERICA. III

Fiber Measurement Studies: A Comparison of Tracheid Dimensions in Longleaf Pine and Douglas Fir, with Data on the Strength and Length, Mean Diameter and Thickness of Wall of the Tracheids: ELOISE GERRY.

This paper is a progress report on the fiber dimension studies that are being made as a part of the investigation into the mechanical, physical and chemical properties of Longleaf pine, *Pinus palustris* and Douglas fir, *Pseudotsuga taxifolia* at the U. S. Department of Agriculture, Forest Products Laboratory, which is maintained in cooperation with the University of Wisconsin at Madison, Wisconsin. The microscopic investigations were made at every tenth annual ring on large cross section from old trees. The following data were recorded for each ring: Age, width, per cent. of summer-wood, height above the ground, distance from the pith, and resin content. Fifty measurements were made of the length, mean diameter and thickness of wall to obtain average. The spring and summer-wood were recorded separately. A number of tracheids proportional, respectively, to the per cents. of spring and summer-wood in the ring were measured. This data supplements that previously presented. It includes a summary of over 7,000 measurements on Douglas fir and 5,000 on longleaf pine. The results are as follows: (1) No evidence could be found for a constant fiber length such as was reported by Sanio for the Scots pine. (2) There are many more bordered pits in the spring than in the summer-wood tracheids. The ends of the tracheids may frequently be blunt or forked. They are generally very pointed in the summer-wood. (3) The summer-wood tracheids in any ring are, in general, shorter than the spring-wood tracheids in all the material studied. (4) There is a rapid increase in all dimensions during the first twenty years. (5) The variation in length in a single tree was found in one disk to be .80–7.65 mm. (6) A direct relation appears to exist in the Douglas fir studied between the thickness of the cell walls of the summer-wood and the strength of the material. The thickness of wall and strength of material were both low in young material. (7) No marked relation was found between width of ring and fiber dimensions. A tendency was noted for the young wide-ringed material to have relatively short, narrow tracheids with thin walls. (8) In studying a 455-year-old Douglas fir the possibility was considered of finding indications of old age or decline indicated in the size of the elements. No such effect was discovered. (9) The Douglas fir and pine did not vary widely in the dimensions of their elements. The thickness of wall averaged high in the longleaf pine, but the diameters were somewhat less than those in fir.

Xerofotic Movements in Leaves: FRANK C. GATES.

Xerofotic movements are paratonic movements, caused by unequal drying effects in direct sunlight, manifested by an upward bend in the leaflets, or the curling upward of the blade. The upward movement is produced by differential turgidity in certain cells. The greater turgidity of the cells on the lower, less exposed side causes the organ to move upwards. In the *localized* xerofotic response, the differential turgidity is largely confined to a small region, for example, the pulvini of leguminous leaflets. In the *generalized* response, the blade of the leaf curls or rolls upwards. The monocot families, Poaceae, Araceae, Marantaceae and Zingiberaceae furnish examples of the generalized response. The Leguminosae furnish the best examples of the localized response, with which this paper deals. Whether the night position of the leaflets is erect or drooping, the xerofotic response is between 45° and 70° above the horizontal or normal day position.